

Claims

1. A storage area network management and configuration system, comprising:

an enterprise network including a plurality of computer systems, wherein some of the plurality of computer systems include a server component, some of the plurality of computer systems include a client component, or both the client component and the server component;

a storage enclosure being connected to a computer system having at least the server component; and

a graphical user interface provided by the client component, the graphical user interface provides a graphical representation and icon links to configuration tools for controlling the storage enclosure.

2. A storage area network management and configuration system as recited in claim 1, wherein the graphical representation and icon links to configuration tools comprise:

an array modifier link for selecting a RAID array that is desired to be modified in terms of adjusting a drive selection and RAID level.

3. A storage area network management and configuration system as recited in claim 1, wherein the graphical representation and icon links to configuration tools comprise:

an array builder link, the array builder link when selected provides selection tabs to allow array building from an array template or from scratch.

4. A storage area network management and configuration system as recited in claim 3, wherein the array building from an array template, comprises:

selecting hardware to configure, the hardware to configure is selected from the storage enclosure or from additional storage enclosures that are connected to the enterprise network;

selecting an array template that contains a RAID configuration scheme that is optimally selected for a particular storage application; and

dragging the selected array template, that is in the form of an icon, over the selected hardware or dragging the selected hardware over the selected array template, the dragging is configured to automatically apply the RAID configuration scheme.

5. A storage area network management and configuration system as recited in claim 4, wherein the RAID configuration scheme includes,

a RAID level;

a number of drives in the selected hardware;

a number of spare drives;

a stripe size; and

an array address.

6. A storage area network management and configuration system as recited in claim 1, wherein the graphical representation and icon links to configuration tools comprise.

an enterprise monitor link, when selected the monitor link provides a window wherein monitoring settings can be set.

7. A storage area network management and configuration system as recited in claim 1, wherein the monitoring settings includes,

a failure indicator; and

a disk capacity indicator.

8. A storage area network management and configuration system as recited in claim 7, wherein the monitoring settings further include,

a temperature indicator for the storage enclosure;

a battery health indicator; and

a power supply health indicator.

9. A storage area network management and configuration system as recited in claim 6, further comprising:

an enterprise monitor window for providing a quick view of selected storage enclosure parameters.

Sub
A1 }
10. A storage area network management and configuration system as recited
in claim 1, wherein the graphical representation and icon links to configuration tools
comprise:

an event notifier link, when selected provides customizable failure and status
5 notifications.

11. A storage area network management and configuration system as recited
in claim 10, wherein the customizable failure and status notifications include,
setting user notification profiles, the profiles include communication information.

12 A storage area network management and configuration system as recited
in claim 11, wherein the communication information includes e-mail information and
pager information.

13. A storage area network management and configuration system as recited
in claim 1, wherein the graphical representation and icon links to configuration tools
comprise:

an enterprise icon, when selected allows viewing of the enterprise network that
includes the plurality of computer systems and associated storage enclosures that are
20 connected to computer systems having the server component.

14. A storage area network management and configuration system as recited in claim 13, wherein the viewing of the enterprise network can be of physical devices or logical devices, and the physical devices and the logical devices can be displayed in one of a tree view and a quick view.

5

15. A storage area network management and configuration system as recited in claim 14, further comprising:

a graphical failure representation is provided of selected drives of the storage enclosure, the graphical failure representation being configured to be displayed on a failed drive when the failed drive is in a viewable setting and on the storage enclosure when the failed drive is not in the viewable setting.

10

16. A storage area network management and configuration system as recited in claim 1, wherein the client component provides a user administrator the management and configuration control to the enterprise network.

15

17. A storage area network management and configuration system as recited in claim 1, wherein the enterprise network can include a plurality of storage enclosures that are connected to selected computer systems that are part of the enterprise network and that have the server component.

20

18. A storage area network system, comprising:

SWN
a server computer system being connected to an enterprise network;

a storage enclosure being connected to the server computer system;

a client computer system having a graphical user interface control for enabling a user to remotely configure drives of the storage enclosure.

5

19. A storage area network system as recited in claim 18, wherein the storage enclosure includes an array of drives.

20. A storage area network system as recited in claim 18, wherein the graphical user interface control includes one or more of an array modifier icon link, an enterprise monitor icon link, an array builder icon link, an event notifier icon link, an unconfigured hardware icon link, a templates icon link, and an enterprise icon link.

21. A storage area network system, comprising:
a server computer system being connected to an enterprise network;
a storage enclosure being connected to the server computer system;
a client computer system having a graphical user interface control for enabling a user to remotely configure drives of the storage enclosure;

wherein the graphical user interface control includes one or more of an array modifier icon link, an enterprise monitor icon link, an array builder icon link, an event notifier icon link, an unconfigured hardware icon link, a templates icon link, and an enterprise icon link.

22. A standalone storage enclosure system for use in a storage area network solution, the system consisting of:

first and second RAID controllers;

5 first and second power supplies;

independent AC power connectors;

first and second fans;

a temperature sensor; and

10 an array of hard disk drives capable of being configured for a particular RAID-based application.

23. A standalone storage enclosure system for use in a storage area network solution as recited in claim 22, wherein the first and second RAID controllers are hot plug controllers.

15

24. A standalone storage enclosure system for use in a storage area network solution as recited in claim 22, wherein the array of hard disk drives includes 12 drives or 20 drives having a width of 1.6 inches and 1 inch, respectively.